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**DEPARTMENT OF INSURANCE**

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TO: Appointed Actuaries of all Life and Disability Insurance Companies and Fraternal Benefit Societies licensed in California, and other Interested Persons

SUBJECT: 2013 Actuarial Memorandum and Regulatory Asset Adequacy Issues Summary

DATE: November 7, 2013

Virtually all Life and Disability Insurance Companies and Fraternal Benefit Societies licensed in California (“companies”) are required to submit an Actuarial Opinion based on Asset Adequacy Analysis.

Certain companies are required to submit their Actuarial Memorandum with additional items as outlined in the attached **Appendix I**.

**All** licensed companies are required to submit the Regulatory Asset Adequacy Issues Summary (“RAAIS”). The items to be addressed are outlined in the attached **Appendix II**.

All companies with variable annuity business subject to NAIC Actuarial Guideline 43 (“AG 43”) are required to submit a standalone AG 43 Analysis. Additional requirements are listed in the attached **Appendix III**.

The 2013 Actuarial Memorandum and the AG 43 Analysis are required to be submitted online using the Online Assistance System for Insurer Submittal (“OASIS”). Electronic filing instructions and mailing information are outlined in the attached **Appendix IV**.

**Please note that all submissions are due by March 17<sup>th</sup>, 2014.** Extension requests beyond this date will be approved when justified.

Supervising Life Actuary

**Appendix I**

**The following companies are requested to electronically submit their 2013 Actuarial Memorandum, as specified in Appendix IV. (All page and line references below refer to the 2013 Life, Accident & Health Annual Statement; some references are different for Fraternal and Health Statement blanks.)**

**COMPANIES SHOULD INDICATE IN THEIR COVER LETTER ALL OF THE FOLLOWING CATEGORIES THAT APPLY.**

- 1. California domestic companies.**
- 2. Companies whose 2013 California Premiums Written (Schedule T, Line 5, sum of Columns 6 & 7) exceeds 20% of the Total Premiums Written (Schedule T, Line 59, sum of Columns 6 & 7).**
- 3. Companies whose ratio of Capital/Surplus (Page 3, Column 1, Line 38) to Net Admitted – Cash & Invested Assets (Page 2, Column 3, Line 12) as of 12/31/13 is below 6%.**
- 4. Companies whose Long Term Care:**
  - Earned Premiums (A&H Policy Experience Exhibit, Column 1, sum of Lines A10.3 & B12) represents more than 5% of total premiums (Exhibit1, Part1, Column 1, Line 20.1) as of 12/31/13, or
  - Contract reserves represent more than 5% of total liabilities (Page 3, Column 1, sum of Lines 1 & 2) as of 12/31/13.

Note: Because of the extremely long-term nature of the risk, use cash-flow testing when testing Long Term Care asset adequacy, in addition to gross premium valuation.

Note that details of the Memorandum section documenting Asset Adequacy Analysis should be prepared in accordance with California Code of Regulations (“CCR”), Title 10, §2580.6(b).

**Additional items to be included in the Actuarial Memorandum (address ALL the following items in order):**

1. Projected income statement for each year of projection period for the baseline level interest rate scenario with items not limited to the following:
  - Premium
  - Gross investment income (as opposed to net investment income)
  - Investment expense
  - Default cost
  - Death benefit
  - Annuity benefit
  - Disability benefit
  - Surrender benefit
  - Other benefits (specify)
  - Maintenance expense
  - Commission
  - Change in reserves
  - Effect of reinsurance

Explain the rationale for the number of years projected for each modeling group.

2. A comparison of 2013 Actual to 2014 Projected for cash-flow components in Item 1 above, and an explanation of any significant difference in terms of dollar amount or rate. For example, while the 2013 actual investment income may differ from the 2014 projected amount, investment rates of return should be comparable. Confirm that the 2013 actual amounts used in the comparison have been reconciled to the company's 2013 Annual Statement.
3. Provide:
  - i. amounts of modeled assets and statement assets as of the projection start date, on both a book basis and market basis, and by asset classes at least as detailed as in the asset page of the statutory statement (e.g. bond, stock, etc.);
  - ii. amounts of modeled liabilities and statement liabilities as of the projection start date, by major inforce blocks or lines of business;
  - iii. aggregate invested assets, policy reserves, and investment reserves (IMR & AVR) for each year of the projection period.
4. Discuss and justify the asset default assumptions for each category and quality of assets. Include a comparison with prior company default experience, and explain differences.
5. Discuss and justify the spread over Treasury assumptions for reinvestment. Include a comparison with prior reinvestment experience, and explain differences.
6. Quantify and discuss the exposure to equities, real-estate, commercial mortgages, CMBS, credit default swaps, collateralized debt obligations, and other structured financial products. Discuss the assumptions and sensitivity testing performed.

7. For all mortgage backed securities, discuss prepayment assumptions used, including a justification for the assumptions. Include a comparison with actual prepayment experience, and explain any differences.
8. Discuss the modeled derivatives with respect to basis risk, counterparty risk, etc. Describe in detail the calculation of projected market values of the modeled derivatives.
9. Due to change in the future value of any non-modeled derivatives, discuss how they may create a liability for the general account.
10. Confirm that the deferred premium assets from the annual statement are included in the asset adequacy analysis. Since they are an offset to reserves, they should be included in the analysis. If not included in the analysis, explain why not.
11. Confirm that no financial borrowing (e.g. FHLB loans) as liabilities, nor pledged (encumbered) collateral as assets, has been included in the asset adequacy analysis. If either has been included in the analysis, give the rationale for doing so.
12. Provide your company's Liquidity Plan. Explain how the Plan relates to the company's ability to deal with stress conditions such as a sudden and significant demand for cash-values, i.e. a "run-on-the-bank" scenario. If the company does not have a Liquidity Plan, explain why such a Plan is not necessary.
13. Provide an overview of your risk management strategy for interest rates. How does this strategy address the company's ability to deal with stress conditions such as a sharp increase in interest rates, or high inflation?

**Appendix II****Regulatory Asset Adequacy Issues Summary (RAAIS)**

**All companies are required to send their RAAIS by March 17, 2014. The RAAIS is required in paper format, to be mailed to the address given in Appendix IV.**

ADDRESS ALL THE FOLLOWING ITEMS IN ORDER:

**CCR, Title 10, §2580.6(c)(1) sub-sections (A) through (F); and the following, as provided for by CCR, Title 10, §2580.6(c)(1)(G):**

1. In addition to the descriptions of scenarios tested in §2580.6(c)(1)(A) above, for both the general and separate accounts, provide the rationale used to choose and develop the scenarios. Discuss how the scenarios and the sensitivity tests reflect a range of conditions consistent with the purpose of the analysis. Provide a numeric summary of results for the scenarios tested.
2. In addition to descriptions and comments under §2580.6(c)(1)(A) and (D) above, additional reserves are to be established as of 12/31/2013 to cover any surplus shortfalls. If any negative interim or ending surplus results are considered insignificant, explain the criteria used for defining “insignificant.”
3. How much additional reserves were established? Confirm that projections were re-run to verify that the amount of additional reserve set up is sufficient to eliminate negative surplus.
4. If any prior additional reserves were released or reduced in 2013, explain why.
5. Give details of any mean reversion assumed in generating the scenarios in §2580.6(c)(1)(A), and discuss the sensitivity testing done on the mean reversion assumptions. If no sensitivity testing was done, explain why none is necessary.
6. Run at least one “baseline” level interest rate scenario using the yield curve as of the projection date (e.g. 9/30/2013 or 12/31/2013). Perform for this scenario a “zero-equity return” sensitivity test in which investment return rates are assumed to be zero throughout the projection period for the separate account assets and those general account assets which may have substantial volatility of returns, e.g., common stock, real estate, Schedule BA assets, etc. Include a discussion of the results.
7. In addition to §2580.6(c)(1)(B) above, explain any changes this year in key asset and liability assumptions (e.g. asset spread, default rate, mortality, lapse).
8. Explain how negative cash flows are funded in the model. Explain why this modeling assumption is different than what would happen in practice, if that is the case. If selling assets is the company’s practice but is not assumed in the model, conduct sensitivity tests for this assumption and discuss the results.
9. Discuss sensitivity testing of key assumptions (mortality, morbidity, expenses, lapses, asset defaults, prepayments, calls, etc.) used in the Asset Adequacy Analysis, including any results of particular concern. If no sensitivity testing of a key assumption were performed, explain why

such testing was not needed.

10. Whether there are any recommendations which have not yet been fully implemented involving reserves from the company's last statutory examination. If there are, give details.
11. For reinsurance assumed under coinsurance funds withheld or modified coinsurance, where the assets are being held by the ceding insurer, how does your company reflect the associated asset risk in its asset adequacy analysis?
12. For any reinsurance ceded to "offshore" reinsurers (not licensed to do business in the US), disclose the resulting percentage of reinsurance ceded and discuss the counterparty risk.
13. To what extent did the company's Capital/Surplus (Page 3, Column 1, Line 38) increase as a result of reinsurance entered into during 2013?
14. Whether the Opinion is qualified or unqualified.
15. Specify any deviations from the Opinion wording in the CCR Title 10 §2580.5(b), and explain the need for such deviations.
16. Provide the premium deficiency reserve (PDR) calculation worksheets showing the amount of reserve held (or no reserve held) for Long Term Care insurance. Reasonable rate increases and regulatory restrictions should be considered. PDR is a tool for solvency to help ensure contractual obligations are adequately funded and is required whenever there is an expectation of loss for a specified line of business.

The RAAIS should be signed and dated by the Appointed Actuary. Include a telephone number and e-mail address.

The RAAIS will be viewed as confidential, and will be destroyed after the review is completed.

**Appendix III**

**All companies with variable annuity business subject to NAIC Actuarial Guideline 43 (“AG 43”) are required to submit the standalone analysis per AG 43 (in electronic format as specified in Appendix IV).**

**The following is required in addition to what is specified in Appendix 8 of AG 43:**

1. Confirm that all Variable Annuities business falling under the scope of AG 43 (per Section II), has been included in the analysis. Describe any in-force business that was not modeled, and why it was not modeled.
2. Specify the amounts from the 2013 Annual Statement by Exhibit and Line that add up to the calculated AG 43 reserves.
3. For each modeling group provide:
  - Starting asset amount
  - GPVAD for each scenario
  - Standard scenario amounts
  - Aggregate Cash Surrender Value
  - Aggregate reserve net of reinsurance ceded
  - Aggregate reserve prior to reinsurance ceded
  - Amount of any additional reserves established
4. In addition to describing scenario generation for stochastic modeling, include the rationale supporting the methodology used to choose the scenarios, for both interest rates and equity returns. Discuss how the scenarios reflect a range of conditions consistent with the purpose of the analysis.
5. Projections of Accumulated Deficiencies: Explain the choice of the length of projection periods for each modeling group.
6. In addition to required disclosures, discuss the rationale, if applicable,
  - for reinsurance under sub-section A8.3)B) of AG 43, and
  - for using any company specific factor under sub-section A8.3)C) of AG 43.
7. Gross Wealth Ratios (derived from the stochastic return scenarios for use with a Separate Account variable fund category for diversified U.S. equities) must satisfy calibration criteria consistent with that for the S&P 500, shown in the prescribed table in sub-section A5.2) of AG 43. In the case where the scenarios do not satisfy all calibration points, explain the differences and why the differences do not materially reduce the resulting reserves.
8. If a sensitivity test was performed to estimate the impact of market return volatility (when market volatility is materially higher than in the generated scenarios), provide the results.
9. For the modeling of derivatives, including but not limited to those in Clearly Defined Hedging Strategy, describe the calculation of their projected market values. When the calculation involves

stochastically projecting the volatilities of the underlying securities, describe the stochastic processes and the derivation of associated parameters.



**Appendix IV**

1. The 2013 Actuarial Memorandum and the AG 43 Analysis are required to be submitted online using the **Online Assistance System for Insurer Submittal (“OASIS”)**.

**For any questions regarding submissions on OASIS contact Financial Records at (213) 346-6423 or e-mail: [Financial\\_Records@insurance.ca.gov](mailto:Financial_Records@insurance.ca.gov).**

2. Electronic copies of the Actuarial Memorandum and the AG 43 Analysis are required on OASIS in **“accessible” PDF** or **Word** formats. Note that an “accessible” PDF document should not contain any scanned pages, and therefore the text should be searchable and extractable, except for the signature pages which can be scanned. Modeling results and other attachments showing numbers (for example, those pertaining to Item 1 on Page 3 and Item 3 on Page 7) should be included in electronic **Excel** format. Companies not required to submit an Actuarial Memorandum (or AG 43 Analysis) should submit a file on OASIS **including “Not Applicable” in the filename**.
3. Provide on OASIS, in electronic **Excel** format, the ending Book Value and Market Value surplus for all the stochastic scenarios used.
4. Make the Memorandum as "user friendly" as possible. For example, if the requested information is in section III, Appendix B, page 4, part (a) of the Memorandum, then put it there. In particular,
  - a. a complete table of contents should be included with page numbers;
  - b. all pages should be numbered in some rational way;
  - c. tabs or some similar method should be used to indicate the beginning of different sections, attachments, appendices, etc.
5. For companies required to submit the Actuarial Memorandum, mail the 2013 Annual Statement (i.e. the “blue,” green” and/or “brown” books, as applicable) to the address below.
6. **Mail the 2013 RAAIS in paper format to the address below.**

Actuarial Memoranda will be viewed as confidential, and will be destroyed after review is completed.

**Questions and Mailing Address:**

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